<div align="center">REMARKS</div>

Claims 1-5, 7-9, 12-23, and 25-38 are currently pending in the subject application and are presently under consideration.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I.   Rejection of Claims 1-5, 12-15, 20-23, and 25-27 Under 35 U.S.C. §103(a)

Claims 1-5, 12-15, 20-23, and 25-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Cowart (Mastering Windows 95) in view of Ortega, *et al.* (US 6,489.968 B1). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Cowart and Ortega, *et al.* do not teach each and every element of the subject invention as recited in the subject claims.

> A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning. See *KSR v. Teleflex*, 550 U.S. ___, 127 S. Ct. 1727 (2007) citing Graham v. John Deere Co. of Kansas City, 383 U. S. 1, 36 (warning against a "temptation to read into the prior art the teachings of the invention in issue" and instructing courts to "'guard against slipping into the use of hindsight'" (*quoting Monroe Auto Equipment Co. v. Heckethorn Mfg. & Supply Co.*, 332 F. 2d 406, 412 (CA6 1964))).

The subject claims relate to controlling display of grouped items as a single group icon or individual icons. A state property can be assigned to the group that determines how the items within the group are displayed when viewed from outside of the group. For example, a group can be assigned an unpacked state that causes the individuals items within the group to be displayed as individual items when viewed from outside the group. On the other hand a group can be assigned a packed state that causes the individuals items within the group to be displayed as a single display item when viewed from outside the group. In particular, independent claim 1 recites *a sorting component to determine categories relating to one or more items for display, wherein the data items are structured in a directory tree; and a cluster component that groups the categories according to discretized states in order to control visible output to the display, the state is assigned as a property to each grouped category, wherein the states include at least a*

packed state that causes items in a grouped category to be displayed as a single icon when viewed from any higher level hierarchical folder outside of the grouped category and an unpacked state that causes each item in a grouped category to be displayed as an individual icon when viewed from each higher level hierarchical folder outside of the grouped category.

Cowart and Ortega, *et al.* do not teach or suggest the aforementioned novel features as recited in the subject claims. The cited reference is silent regarding discretized states assigned to each category that control visible display of the grouped data items. Cowart discloses the traditional hierarchical folder display, where items are only displayed when the folder that contains the items is selected. The Office Action dated August 16, 2007 asserts that use of a shortcut discloses the packed and unpacked states recited in the subject claims. However, a shortcut is a separate object which may contain a pointer to an item. If the item being pointed to gets deleted, the shortcut object still remains. The shortcut is not a state of display as taught in the claim, but is the creation of shortcut objects in every location from which the item being pointed to is to be accessed. Furthermore, a shortcut would need to be created for each item within each folder at each level in the folder hierarchy above the folder containing the items, in order to simulate the unpacked state represented by the property assigned to the group. Going back to the packed state would require deletion of all of the shortcut objects that were created for each individual item and then creating a shortcut to the folder containing the items at each level in the folder hierarchy above the folder containing the items. In fact, Cowart is silent regarding the packed and unpacked states as described above. The subject claims allow items within a category to be displayed as individual items when a higher level directory location is selected if the sub-folder is given the unpacked state. The subject claims also allow items within a category to be displayed as a group represented by a single icon when a higher level directory location is selected if the category is given the packed state. The assignment of the state property to the group controls display of the group and items within the group for the packed and unpacked state. This provides a simple way of controlling the display of the group and items in the group without having to be aware of the creation, deletion, and moving of the group or higher level folders. Ortega, *et al.* is cited to make up for the identified deficiencies of Cowart. However, Ortega, *et al.* also fails to teach the packed an unpacked states as discussed above. The cited reference discloses a dynamic product advertising system where lower level product categories and products are elevated by copying the product to display at higher level nodes of a tree

browsing structure. The system determines which nodes are to be elevated based upon a popularity score. This is not equivalent to an assignment of a packed or unpacked state that is definitive regarding display of the category at high levels. The popularity score is employed in a recursive algorithm that goes through each node of the tree and determines which lower level nodes will be elevated for that particular node. As such, each node has a unique set of lower level nodes that are elevated for display at that particular node. (*See* Ortega, *et al.* e.g., column 3, lines 18-21 and column 17, lines 4-5) This means that a lower level node may be elevated to the next higher level node for display, but may not be elevated any higher. It is dependent on the scores of higher level nodes. Therefore, the elevation of the node does not apply to **each** higher level directory location as recited in the subject claim. Furthermore in Ortega, *et al.*, elevation of a category node does not cause each item in the category to be displayed as an individual icon when viewed from each higher level hierarchical folder. Only the category name would be visible as taught by Ortega, *et al.* In addition, elevation involves copying or moving the node to the elevated location in the tree structure, not just displaying the node at the higher level location. (*See* Ortega, *et al.* e.g., column 7, lines 46-50) This would be similar to the shortcuts of Cowart. The Office Action dated October 20, 2008 admits that Cowart and Ortega, *et al.* do not explicitly teach all of the elements of the claim, but asserts that that the state property of the subject claim is an obvious variation of the disclosure of Ortega, *et al.* On the contrary, Ortega, et al. does not suggest an explicitly defined state that controls the display of items in a group as in the packed and unpacked states recited in the claim. The reference discloses a subjective control that is based upon the popularity of the item. The popularity is not a definitive control due to its dependence on the popularity of other items within the directory structure. As such, there is no explicit control that is set for an item that would definitively cause the item to be displayed according to the packed and unpacked states recited in the subject claim. Ortega, *et al.* does not make any suggestion regarding an explicitly defined state property that provides control for the display of items within a group at all higher level folders. Therefore, Cowart and Ortega, *et al.* fail to teach or suggest a state is assigned as a property to each grouped category, wherein the states include at least a packed state that causes items in a grouped category to be displayed as a single icon when viewed from any higher level hierarchical folder outside of the grouped category and an unpacked state that causes each item in a grouped category to be displayed as an individual icon when viewed from each higher level hierarchical folder outside of the grouped

category .

Independent clam 25 recites *means for determining a state for a subset of data items, wherein the data items are organized in a directory tree structure; means for* **assigning the state as a property to the subset of data items; and means for displaying each item in the subset according to the assigned state, wherein the states include at least a packed state that causes data items in the subset to be displayed as a single icon when viewed from any higher level hierarchical directory location outside of the subset and an unpacked state that causes each data item in the subset to be displayed as an individual icon when viewed from each higher level hierarchical directory location outside of the subset.** As discussed above, Cowart and Ortega, *et al.* fail to teach or suggest assignment and display control of a packed and unpacked state as also disclosed in claim 25 and thus does not teach all elements of the subject claim.

In view of the foregoing, applicants' representative respectfully submits that Cowart fails to teach or suggest all limitations of independent claims 1, and 25 (and claims 1-5, 10-14, 20, 21 and 24 that depend there from), and thus fails to anticipate the subject claims. Accordingly, withdrawal of this rejection is respectfully requested.

II.   Rejection of Claims 28-31 Under 35 U.S.C. §103(a)

Claims 28-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hasegawa, *et al.* (US 6,513,038) in view of Ortega, *et al.* (US 6,489,968 B1). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Hasegawa, *et al.* and Ortega, *et al.* do not teach each and every element of the subject invention as recited in the subject claims.

Independent claim 28 recites *determining packed or unpacked states for a collection of data items, wherein the data items are organized in a hierarchical structure; grouping the data items according to the determined states; displaying items that have been grouped and are associated with packed states as a single item in the display when viewed from any higher level hierarchical structural location outside of the group; displaying items that are grouped and are associated with unpacked states as individual items in the display when viewed from each higher level hierarchical structural location outside of the group.* As conceded in the Office Action, Hasegawa, *et al.* is silent regarding discretized states that control visible display of the grouped data items in packed or unpacked states. Hasegawa, *et al.* discloses virtual hierarchical

file structure that employs database view technology to construct application specific directory structures. The customized directory structure is displayed in a traditional hierarchical tree structure that is navigable up or down. The cited reference fails to disclose packed and unpacked states as taught in the subject claim. Ortega, *et al.* fails to make up for the deficiencies of Hasegawa, *et al.* As noted *supra*, the elevation feature of Ortega, *et al.* also fails to teach the explicit assignment and display control of packed and unpacked states as disclosed in claim 28. Therefore, Hasegawa, *et al.* and Ortega, *et al.* fails to teach or suggest all limitations of the subject claim..

In view of at least the foregoing discussion, applicants' representative respectfully submits that Hasegawa, *et al.* and Ortega, *et al.* fails to teach or suggest all limitations of as recited in independent claim 28 (and claims 29-31 that respectfully depend there from), and thus fails to make obvious the subject claimed invention. As such, withdrawal of this rejection is respectfully requested.

III.   Rejection of Claims 7, 8, 16-19, and 34-38 Under 35 U.S.C. §103(a)

Claims 7, 8, 16-19, and 34-38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Cowart (Mastering Windows 95) in view of Ortega (US 6,489.968 B1) and further in view of Hasegawa, *et al.* (US 6,513,038). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Cowart, Ortega, *et al.*, and Hasegawa, *et al.* do not teach each and every element of the subject invention as recited in the subject claims.

Claims 7, 8 and 16-19 depend from independent claim 1. Independent claim 34 (similarly to independent claims 1 and 28) recites *a first data field related to at least one group property associated with a subset of data items for display, wherein the group property includes at least a packed state that causes data items in the subset to be displayed as a single icon when viewed from any higher level folder outside of the subset and an unpacked state that causes each data item in the subset to be displayed as an individual icon when viewed from each higher level folder outside of the subset; a second data field for the data items; and a third data field to control how the data items are to be directed to a computerized display.* As noted above, with respect to independent claims 1 and 28, Cowart, Ortega, *et al.*, and Hasegawa, *et al.* fails to teach these novel features as discussed above in relation to the similar limitations of independent claims 1 and 28.

In view of at least the foregoing discussion, applicants' representative respectfully submits that Cowart, Ortega, *et al.*, and Hasegawa, *et al.*, alone or in combination fails to teach or suggest all limitations as recited in independent claim 1 and 34 (and claims 7, 8, 16-19 and 35-38 that respectfully depend there from), and thus fails to make obvious the subject claimed invention. Therefore, withdrawal of this rejection is respectfully requested.

IV.   Rejection of Claim 9 Under 35 U.S.C. §103(a)

Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Cowart (Mastering Windows 95) in view of Hasegawa (US 6,513,038) and Ortega et al. (US 6,489,968 B1) and further in view of Newman (US 2004/0139231 A1). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Cowart, Ortega, *et al.*, and Hasegawa, *et al.* do not teach each and every element of the subject invention as recited in the subject claims.

Claim 9 depends from independent claim 1. As noted *supra*, Cowart, Ortega, *et al.*, and Hasegawa, *et al.* do not teach or suggest *states including at least a packed state that causes items in a grouped category to be displayed as a single icon when viewed from any higher level hierarchical folder outside of the grouped category that is in a path from the items in the grouped category to a root of the hierarchical structure and an unpacked state that causes each item in a grouped category to be displayed as an individual icon when viewed from each higher level hierarchical folder outside of the grouped category that is in a path from the items in a the grouped category to the root of the hierarchical structure* as recited in independent claim 1. Furthermore, Newman, *et al.* fails to make up for the aforementioned deficiencies of these cited references with respect to independent claim 1. The cited reference discloses a system that allows for the exchange of contextual information between devices. The system also allows a display from a mobile device to be rendered on a desktop through a network connection. However, Newman, *et al.* is silent regarding a packed state and an unpacked state that explicitly controls display of items as recited in the subject claims..

In view of at least the foregoing discussion, applicants' representative respectfully submits that Cowart, Ortega, *et al.*, Hasegawa, *et al.*, and Newman, *et al.*, alone or in combination fails to teach or suggest all limitations as recited in independent claim 1 (and claim

9 that respectfully depends there from), and thus fails to make obvious the subject claimed invention. Therefore, withdrawal of this rejection is respectfully requested.

V.   Rejection of Claims 32 and 33 Under 35 U.S.C. §103(a)

Claims 32 and 33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hasegawa, *et al.* (US 6,513,038) in view of Ortega, *et al.* (US 6,489,968 B1) and further in view of Cowart (Mastering Windows 95). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Cowart, Ortega, *et al.*, and Hasegawa, *et al.* do not teach each and every element of the subject invention as recited in the subject claims.

Claims 32 and 33 depend from independent claim 28. As noted *supra*, Hasegawa, *et al.* and Ortega, *et al.* do not teach or suggest ***determining packed or unpacked states for a collection of data items,*** *wherein the data items are organized in a hierarchical structure;* ***grouping the data items according to the determined states; displaying items that have been grouped and are associated with packed states as a single item in the display when viewed from any higher level hierarchical structural location outside of the group; displaying items that are grouped and are associated with unpacked states as individual items in the display when viewed from each higher level hierarchical structural location outside of the group*** as recited in independent claim 28. Furthermore, Cowart fails to teach these novel features as discussed above in relation to the similar limitations of independent claims 1, 25, and 34.

In view of at least the foregoing discussion, applicants' representative respectfully submits that Cowart, Ortega, *et al.* and Hasegawa, *et al.*, alone or in combination fails to teach or suggest all limitations as recited in independent claim 1 (and claims 7, 8 and 16-19 that respectfully depend there from), and thus fails to make obvious the subject claimed invention. Therefore, withdrawal of this rejection is respectfully requested.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP532US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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